UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

210

7590

08/28/2009

MERCK AND CO., INC P O BOX 2000 RAHWAY, NJ 07065-0907 EXAMINER

SAEED, KAMAL A

ART UNIT PAPER NUMBER

1626

DATE MAILED: 08/28/2009

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/586.976	07/19/2006	Guo O. Shi	21613P	2774	

TITLE OF INVENTION: ANTIDIABETIC OXAZOLIDINEDIONES AND THIAZOLIDINEDIONES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica		ng the Patent, advance on nerwise in Block 1, by (a	rders and notification and specifying a new co	of mai orrespo	intenance fees wondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspo rate "FF	ondence address as EE ADDRESS" for
	ENCE ADDRESS (Note: Use Bl	,]	Note: A certificate of mailing can only be used for domestic mailings of t Fee(s) Transmittal. This certificate cannot be used for any other accompanyi papers. Each additional paper, such as an assignment or formal drawing, muhave its own certificate of mailing or transmission.					ther accompanying
MERCK AND P O BOX 2000 RAHWAY, NJ	ŕ	/2009	,	States addres:	by certify that the Postal Service we sed to the Mail	is Fee(ith suf Stop	e of Mailing or Transı s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the d	deposit t class r above,	ted with the United mail in an envelope or being facsimile
									(Depositor's name)
									(Signature)
			l						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	ГOR		ATTO	RNEY DOCKET NO.	CONF	FIRMATION NO.
10/586,976 TITLE OF INVENTION	07/19/2006 i: ANTIDIABETIC OXA	AZOLIDINEDIONES AN	Guo Q. Shi ID THIAZOLIDINEDI	IONES	\$		21613P		2774
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE P	REV. PAID ISSUI	E FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	NO	\$1510	\$300		\$0		\$1810		11/30/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS		コ				
SAEED, K	KAMAL A	1626	514-369000						
"Fee Address" ind PTO/SB/47; Rev 03-(Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un	oondence address (or Cha B/122) attached. dication (or "Fee Address 22 or more recent) attach ND RESIDENCE DAT/ less an assignee is ident th in 37 CFR 3.11. Com	nge of Correspondence	data will appear on th	p to 3 nativelyingle for age attorned be prior type) ne pate	registered paten y, irm (having as a nt) and the name eys or agents. If inted.	membes of uno name	er a 2p to lee is 3leentified below, the do	ocument	t has been filed for
4a. The following fee(s) Issue Fee			inted on the patent): D. Payment of Fee(s): (I A check is enclose Payment by credit	Please ed.	first reapply ar	ıy prev	riously paid issue fee		
Advance Order -		The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).							
	ns SMALL ENTITY statu	is. See 37 CFR 1.27.					ΓΙΤΥ status. See 37 CF		
interest as shown by the	records of the United Sta	uired) will not be accepte tes Patent and Trademark	of from anyone other the Office.	an the	applicant; a regi	sterea	attorney or agent; or th	e assign	ee or other party in
Authorized Signature	Date								
		-							
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this burilinginia 22313-1450. DC 313-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the in e Chief Information Ol COMPLETED FORMS	or reta s estim ndividu fficer, S TO T	nin a benefit by the stated to take 12 records and case. Any could be sufficient and THIS ADDRESS	he publ minutes mment Traden S. SENI	lic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner f	by the g gather ne you r ertment for Pater	USPTO to process) ing, preparing, and require to complete of Commerce, P.O. nts, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/586,976	07/19/2006		Guo Q. Shi	21613P	2774		
210	7590	08/28/2009		EXAM	INER		
MERCK AND (CO., INC			SAEED, K	AMAL A		
P O BOX 2000				ART UNIT	PAPER NUMBER		
RAHWAY, NJ 07	7065-0907			1626			
		DATE MAILED: 08/28/2009					

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 573 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 573 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/586,976	SHI ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Kamal A. Saeed	1626	
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIP of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to communication filed of the allowed claim(s) is/are 1-14 and 18 now renumbered and 18 lowed claim(s) is/are 1-14 and 18 now renumbered and 19 lowed claim(s) is/are 1-14 and 18 lowe	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is and MPEP 1308. on May 05, 2009.	in this application. If not included nunication will be mailed in due cou subject to withdrawal from issue at	ırse. THIS
1. ☐ Certified copies of the priority documents have	e been received.		
2. ☐ Certified copies of the priority documents have		ion No	
3. ☐ Copies of the certified copies of the priority do	• •		from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached E>	(AMINER'S AMENDMENT or NOT	
5. CORRECTED DRAWINGS (as "replacement sheets") mus	. ,		
(a) ☐ including changes required by the Notice of Draftspers		ew (PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date		,	
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1			ck) of
each sheet. Replacement sheet(s) should be labeled as such in t			SK) OI
 DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT 			∍ the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4/30/07; 5/5/09 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview S Paper No 7. ☑ Examiner'	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowal	nce

Art Unit: 1626

DETAILED ACTION

Claim 15 has been cancelled. Therefore, claims 1-14 and 16-18 are currently pending in this application.

Information Disclosure Statement

Applicant's Information Disclosure Statements, filed on April 30, 2007 and May 05, 2009 have been considered. Please refer to Applicant's copies of the 1449 submitted herewith.

Response to Restriction

Applicants' election, with traverse, of Group I, claims 1-14 drawn compounds and

$$O = \left(\begin{array}{c} (R_2)_m \\ (R_3)_p \\ (R_4)_n \end{array} \right)$$

$$O = \left(\begin{array}{c} (R_4)_n \\ (R_4)_n \end{array} \right)$$

composition of Formula

and the

specific compound of Example 5,

, in response, filed May 05,

2009 is acknowledged. Applicant's argument was persuasive and therefore, the

restriction requirement mailed on April 15, 2009 is hereby withdrawn. All the pending claims 1-14 and 16-18 have been examined.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard C. Billups on August 27, 2009

Delete claims 16 and 17.

REASONS FOR ALLOWANCE

The compounds, compositions and method of using the compounds of Formula I

$$0 \stackrel{\text{HN}}{\underset{R_1}{\longleftarrow}} (R_2)_m \stackrel{(R_5)_p}{\underset{R_6}{\longleftarrow}} (R_4)_n$$

are novel and non-obvious over

the prior art because of the structural limitation that there is a 5-membered heteroring as

Application/Control Number: 10/586,976 Page 4

Art Unit: 1626

shown in the Formula. The closest prior art is WO 2005/037763 which discloses

$$(\mathbb{R}^{s})_{r} \qquad (\mathbb{R}^{s})_{r} \qquad (\mathbb{R}^{s})_{r}$$

$$(\mathbb{R}^{s})_{r} \qquad (\mathbb{R}^{s})_{r} \qquad A \qquad Q$$

$$\mathbb{R}^{1} \qquad \mathbb{R}^{2}$$

$$\mathbb{R}^{2} \qquad \mathbb{R}^{2} \qquad \mathbb{R}^{3} \qquad \mathbb{R}^{2}$$

phenoxyether derivatives of formula

compound disclosed in WO 2005/037763 is not within the scope of the compounds of the instant claims nor is it an obvious variant. Therefore, claims 1-14 and 18 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamal A Saeed whose telephone number is (571) 272-0705. The examiner can normally be reached on M-T 7:00 AM- 5:30 PM.

Communication via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise requires a signature, may be used by applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not

Application/Control Number: 10/586,976 Page 5

Art Unit: 1626

communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or public PAIR only. For more information about the pair system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

/Kamal A Saeed,/

Primary Examiner, Art Unit 1626